

4269a W.D.

Diag. Cht. No. 5101-2 & 5102-2

Form 504	
DEPARTMENT OF COMMERCE	
U. S. COAST AND GEODETIC SURVEY	
G. & S. SURVEY L. & A. MAY 21 1928	
State: California	Acc. No.
11-5613	
DESCRIPTIVE REPORT.	
WIRE DRAG ² Sheet No. 4269a	
LOCALITY:	
San Diego Bay	
San Diego Harbor	
1928	
CHIEF OF PARTY:	
F. G. Engle	

Statistics and List of Grounds of Add'l Wk. 1928 added Nov. 10, 1928
HAR

4269a W.D.

DESCRIPTIVE REPORT

to accompany

4269^a

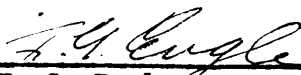
WIREDRAG SHEET NO.2 - - - - - SAN DIEGO HBR.

Executed in accordance with Par., 6 of Director's Instructions
dated January 11, 1928.

The 19 ft., spot was covered with an effective depth of 20 ft., without grounding. Due to the nearness of the 20 ft., curve and a 21 ft., sounding close to the 19 ft., spot on photostat of Hydrographic Sheet No., 4269, the effective depth of 20 ft., was about all that could be attempted because if the drag grounded on the 21 ft., sounding the existence of the 19 ft., spot would not be definitely disproven.

The drag used was a 500 ft., standard type using a canvas buoy and 35 lb., weight at each 100 ft., section and a 70 lb., sounding shot at the ends. The towline was 100 ft., long and consisted of a 100 ft., section both to the end buoy and end weight. The lift was measured by a wire center leadline and found to be less than 1 ft., in middle at dead slow speed. Due to wind and sea it was not practicable to measure the lift at moderately slow speed on the second line on which the shoal in question was covered. However on Sheet #1 the lift was found under the same speed to be less than 2 ft., in middle and less than 3 ft., at ends and a lift of 2 ft., was therefore adopted for the second line on Sheet #2.

Respectfully submitted,


F. G. Engle,
H. & G. Engineer,
Chief of Party.

STATISTICS FOR WIRE DRAG SHEET NO.2

Date	Day	No. of pos.	Miles (statute)	Vessel	Remarks
Feb.3	a	21	0.5	Stbd. M.S.	Guide Launch
" 3	a	32	0.5	Port M.S.	End Launch

After a consultation with the Chiefs of Field Records and Field Work, it was decided to retain the 19-foot sounding on the chart.

A. L. Shalowitz.

Approved:

Chief, Section of Field Records (Charts)

Chief, Section of Field Work (H. & T.)

T.H.

(11)

Copy for Section of Field Records files.

May 22, 1928.

Division of Hydrography and Topography:

Division of Charts:

Tide reducers are approved in
/ volume of sounding records for

HYDROGRAPHIC SHEET

4259a *add.*

Locality:

SAN DIEGO, CALIFORNIA.

Chief of Party:

Plane of reference is **P. G. Eagle, 1928.**
ft. on tide staff **at L L W**

2.0

San Diego (O. & G.S. Staff)

Condition of records satisfactory except as checked below:

1. Locality and sublocality of survey omitted.
2. Month and day of month omitted.
3. Time meridian not given at beginning of day's work.
4. Time (whether A.M. or P.M.) not given at beginning of day's work.
5. Soundings (whether in feet or fathoms) not clearly shown in record.
6. Leadline correction entered in wrong column.
7. Field reductions entered in "Office" column.
8. Location of tide gauge not given at beginning of each day's work.
9. Leadline corrections not clearly stated.
10. Kind of sounding tube used not stated.
11. Sounding tube No. entered in column of "Soundings" instead of "Remarks".
12. Legibility of record could be improved.
13. Remarks.

[Signature]
Chief, Division of Tides and Currents.

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

HYDROGRAPHIC TITLE SHEET

Wire Drag.

The finished Hydrographic Sheet is to be accompanied by the following title sheet, filled in as completely as possible, when the sheet is forwarded to the Office.

U. S. Coast and Geodetic Survey.

Register No. ² 42692 WIRE DRAG

State California
General locality . San Diego Harbor Bay
Locality . . . 19 ft., spot San Diego Harbor
Chief of party . F. G. Engle
Surveyed by . . F. G. Engle
Date of survey . February 3, 1928.
Scale . . . 1/5000 ^{10,000}
Soundings in . Feet
Plane of reference M.L.L.W.
Protracted by T.B.R. . . Soundings in pencil by
Inked by . . . T.B.R. . . Verified by
Records accompanying sheet (check those forwarded):
Des. report, 1 Tide books, ~~1~~ Marigrams, 1 Boat sheet ~~1~~
~~1~~ Sounding books, 1 Wire-drag books ~~1~~ Photographs.
Data from other sources affecting sheet

Remarks:

Sheet #2.

42692

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

WIRE DRAG
HYDROGRAPHIC TITLE SHEET

The Hydrographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

Field No.

REGISTER NO. 4269a Add'l. Wk.
on orig. Sheet

State..... California

General locality..... San Diego Harbor

Locality..... Lower harbor

Scale..... 1/10,000 Date of survey..... April 18, 19 1928

Vessel..... Discoverer

Chief of Party..... F.G. Enloe

Surveyed by..... L.D. Graham

Protracted by..... G.A. Nelson

Soundings penciled by..... G.A.N.

Soundings in ~~fathoms~~ feet

Plane of reference..... MLLW

Subdivision of wire dragged areas by..... G.A.N.

Inked by..... ~~G.A.N.~~ R.L.G.

Verified by..... R.L.G.

Instructions dated..... April 2 & 7 1928

Remarks:..... Additional work

REG. NO. 4269a Add'l Wk

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

REG. NO.

HYDROGRAPHIC TITLE SHEET

The Hydrographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

Field No.

REGISTER NO.

State.....

General locality.....

Locality.....

Scale..... Date of survey....., 192

Vessel.....

Chief of Party.....

Surveyed by.....

Protracted by.....

Soundings penciled by.....

Soundings in fathoms feet

Plane of reference.....

Subdivision of wire dragged areas by.....

Inked by.....

Verified by.....

Instructions dated....., 192

Remarks:.....

DEPARTMENT OF COMMERCE

AND REFER TO NO. 11-DRM

U. S. COAST AND GEODETIC SURVEY

WASHINGTON

June 16, 1928.

SECTION OF FIELD RECORDS

Report on Hydrographic Sheet No. 4269^a (Additional Work)

Additional Wire Drag Examination of 19-foot sounding in San Diego Harbor

Surveyed in April, 1928

Instructions dated April 2, 1928 (DISCOVERER)

Chief of Party, F. G. Engle.

Surveyed by L. D. Graham.

Protracted and plotted by G. A. Nelson.

Inked and verified by R. L. Johnston.

1. The instructions for this work call for a re-examination of the 19-foot sounding shown on H. 4269. The edge of the drag strip from pos. 26 b to pos. 27 b, with an effective depth of 22 feet, passes through the 19-foot sounding but does not overlap it. It is doubtful if it was covered with this depth.

The 19-foot sounding is covered by an effective depth of 20 feet, from pos. 29 c to pos. 30 c. The nearest drag test to this point showed the lift to be one half foot. As an allowance of one foot was made for lift, it seems certain that at least 20 feet was carried over this point.

A drag with a deeper depth should have been brought up to this point and allowed to either ground or pass over and a leadline examination made if the drag did ground.

2. Several other shoal spots were found by the additional wire drag work. They are listed in the list of grounds.
3. The records are satisfactory.
4. The field plotting was well done.
5. An Area & Depth Sheet has now been prepared for the combined work.
6. Reviewed by R. L. Johnston.

LIST OF GROUNDS

TO ACCOMPANY WIRE DRAG SHEET NO. 4269a
Additional Work 1928 shown on original sheet

- Pos. 12 B: Grounded at an effective depth of 22 feet.
Sounding of 21 feet obtained. Not covered later.
- Pos. 18 B: Grounded at an effective depth of 23 feet.
Sounding of 22½ feet obtained. Covered in C day
with an effective depth of 20 feet.
- Pos. 22 B: Grounded on same shoal as at 18 B with 22 feet.
Cleared on C day with 20 feet.
- Pos. 29 B: Grounded at an effective depth of ²²~~20~~ feet.
Sounding of 21 feet obtained. Covered in C day
with an effective depth of 20 feet.
- Pos. 6 C: Grounded at an effective depth of 20 feet. Sounding
of 21 feet obtained. Not covered later as ground
was at edge of known shoal water.
- Pos. 16 C: Grounded at an effective depth of 20 feet. Least
sounding obtained was 21 feet. Cleared later on
same day with 19 feet.

Statistics for Wire Drag Sheet No.4269a
Additional Work 1928 shown on orig. Sheet

Date	Day	Boat	Vol.No.	No.Pos.	No.Sdgs.	St.mi.drag lines
April 18	b	Port & Stbd.Launches	2	50	4	2.6
" 19	c	"	2	81	4	5.0
Totals				131	8	7.6

As so small a clearance would not ordinarily be considered sufficient to remove a shoal sounding from the chart, there would seem to be no reason why a departure should be made in the present case, particularly since the 21 foot sounding on the original survey tends to bolster up the existence of the 19. It is . . . recommended that for the present the 19 foot sounding be retained on the charts. Should it be desirable in the future to definitely establish the existence or non-existence of the 19, a drag set at an effective depth of 22 or 23 feet could be grounded on the 19 and 21 and a leadline examination for least water made at the point of grounding.

3. Since this sheet is not to be used as a basis for removing the 19 from the charts, the limits of the drag work will not be transferred to the original hydrographic sheet (H-4269). No A & D sheet has been prepared for this sheet, as the smooth sheet is practically an A & D sheet in itself.

4. Reviewed by A. L. Shalowitz, March, 1928.

Approved:

A. L. Giacomini
Chief, Section of Field Records (Charts)

L. O. Collet.
Chief, Section of Field Work (H. & T.)

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
WASHINGTON

REF ID: A611-VEC

March 27, 1928.

SECTION OF FIELD RECORDS

Report on Hydrographic Sheet No. 4269^a

Wire Drag Examination of 19 foot sounding in San Diego Harbor.

Surveyed in 1928

Instructions dated January 11, 1928 (DISCOVERER)

Chief of party F. G. Engle.

Surveyed by " " "

Protracted and inked by T. B. Reed.

Verified by G. Risegari.

1. This survey comprises a wire drag examination of a 19 foot sounding found on H-4269 (pos. 55 r) in lat. 32 41 392 m., long. 117 08 1005 m. While the original sounding is somewhat doubtful, 3 fathoms having been recorded in the fathoms column without the customary 0 in the feet column, the subsequent examination by the same party by no means ~~discredited~~ the existence of the 19.

It will be noticed on close examination that on the line 67-68 u, a 24 foot sounding was obtained at practically the same spot as the 19, but at position 131 t only 22 meters away from the 24, a 21 foot sounding was obtained. This being surrounded by 23 and 24 foot soundings shows the existence of a lump. If this condition can prevail here there is no reason why the 19 foot sounding cannot exist.

2. As far as the present survey tends to disprove its existence, the following should be considered,

When the drag was carried over this 19 foot spot the wind and sea were so strong as to make ~~it~~ a test for lift impracticable. A correction for lift was applied based on a lift test taken on another day when the drag was being towed at approximately the same speed. This lift was found to be less than 2 feet in the middle of the drag and less than 3 feet at the ends. A 2 foot correction was therefore applied making the effective depth of the drag at the time it passed over the 19 foot spot (18.8 actual), 19.9 to 20.0 feet.

DEPARTMENT OF COMMERCE

AND REFER TO NO. 11-VEC

U. S. COAST AND GEODETIC SURVEY

WASHINGTON

March 27, 1928.

SECTION OF FIELD RECORDS

Report on Hydrographic Sheet No. 4269^e

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Surveyed in 1928

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(11)

March 16, 1928.

Division of Hydrography and Topography:

Division of Charts:

Tide reducers are approved in
1 volumes of sounding records for

HYDROGRAPHIC SHEET 4269a (W.D.)

Locality: SAN DIEGO HARBOR, CALIFORNIA.

Chief of Party: F. G. Engle, 1928.

Plane of reference is M L J W

2.0 ft. on tide staff at San Diego (O. & G.S. Staff)

Condition of records satisfactory except as checked below:

1. Locality and sublocality of survey omitted.
2. Month and day of month omitted.
3. Time meridian not given at beginning of day's work.
4. Time (whether A.M. or P.M.) not given at beginning of day's work.
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9. Leadline corrections not clearly stated.
10. Kind of sounding tube used not stated.
11. Sounding tube No. entered in column of "Soundings" instead of "Remarks".
12. Legibility of record could be improved.
13. Remarks.

Chief, Division of Tides and Currents.